focus on women

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ACTION FOR EQUALITY, DEVELOPMENT AND PEACE

Women and Industry

Jitbarek Hagare was already a rarity — a female graduate of the Department of Mechanical Engineering at the University of Technology in Ethiopia — when she was recruited by the Ethiopian Marble Industry in 1984 to work on a project headed by another woman. In 1985, despite negative attitudes expressed by some of the factory managers, she was sent to Italy for training in marble quarrying and processing technology, and then to Turkey to learn about modern export-oriented marble production and management. Six months later, her skills bolstered by career counselling, exposure to daily operational activities and on-the-job training, she was promoted to the post of Assistant Production Manager. Today Jitbarek Hagare is in charge of four factories, supervising 200 employees, 30 of whom are women.

The aim of sustainable industrial development is to provide people — both men and women — with options for a better future. Through its close links with other productive sectors, particularly agriculture and services, industry opens up job opportunities and provides goods which ultimately improve the quality of life. Any meaningful global agenda for development should recognize the role of people-centred and sustainable industrialization in addressing socio-economic issues. It should also recognize the significant part women play, both as producers and as consumers.

Unfortunately, Jitbarek Hagare's case — a woman from a developing country with a successful career in industry — is still highly unusual. Industry continues to suffer from a gender bias; major adjustments have to be made before women can participate on an equal footing with men in shaping the structure of industrial development so that economic benefits can be balanced with social progress.

Women: One-third of the manufacturing labour force

The word "industry" conjures up images of sweaty men, deafening machines and smokestacks. Although it is true that most heavy industries are still dominated by men, studies carried out by the United Nations Industrial Development Organization (UNIDO) since 1992 confirm that on a global average, women account for a third of

the manufacturing labour force. If one were to include the invisible brigades of home-based women producing goods through sub-contracting arrangements, the number would probably rise to 40 per cent. Add to this the countless women who work at the bottom end of the market as operators of small-scale and micro-enterprises, producing low-cost goods and processed foods, and the number could rise to 60 per cent. In countries where industrialization has been both swift and successful, the participation of women in manufacturing has been even more significant, particularly in the lowest salary and occupational groups. This is particularly true in the case of export-oriented economies.

The greater proportion of the female workforce is found

UNITED NATIONS

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in micro- to medium-sized industries, in both the formal and informal sectors, as well as in export-oriented industries, where women make a valuable contribution to the overall socio-economic development of society. A more detailed and accurate assessment of the number of women involved is hampered by a conspicuous lack of statistical data on the productive activities carried out by women in the non-structured sectors of the economy as well as in various sub-sectors of industry.

There is a positive relationship between social development indicators and women's participation in manufacturing.

There is a positive relationship between social development indicators and women's participation in manufacturing. As women take on salaried jobs in the manufacturing sector, there is a corresponding increase in literacy, improvement in life expectancy and lowering of fertility rates, all helping to break the circle of poverty and enhance the empowerment of women. Therefore, any policy measures relating to industrial development must take into account the crucial contribution of the female industrial workforce to economic, industrial and social progress.

What are the obstacles?

INTERNATIONAL TRENDS: In times of economic hardship, women are still most likely to feel the crunch. Particularly in developing and industrializing countries, global restructuring, trade-liberalization policies and the relocation of manufacturing industries all conspire to limit women's opportunities and force them to take up productive activities as entrepreneurs or to enter the workforce in low-skilled jobs in, for example, export-oriented industries.

EDUCATION: The continuing disparity between men and women in second- and third-level education, in addition to the existing male bias in employment rates across the regions, makes it difficult and sometimes impossible for women to enter the industrial labour force at other than the lowest-paid, and lowest-skilled, levels. In some countries of Central and Eastern Europe, though more than half the girls entering secondary school opt for a technical track, statistics show they do not go on to have the same career opportunities as men. One reason is undoubtedly that they have far less access to further training and skills upgrading.

LACK OF ACCESS TO CREDIT, TRAINING, INFORMATION & TECHNOLOGY: While restricted access to both credit and markets features high on the list of obstacles faced by women entrepreneurs, an Expert Group Meeting on Women in the Food Processing Sector in Africa, organized by UNIDO in January 1994, considered that other constraints deserved equal attention, namely access to information, technologies and training as prerequisites for success.

STEREOTYPES: Gender stereotypes and cultural, religious and traditional barriers aggravate the situation even further.

These factors and the working conditions experienced by women in industry leave a lot to be desired. Many women are put off by the idea of working in industry due to the absence of childcare and medical facilities at the workplace, the unsafe or unhealthy working conditions and the discrimination they suffer vis-à-vis their male colleagues in terms of promotion and training.

The question therefore is not simply whether there should be an increased number of women working in manufacturing, but rather how to address the problems and needs of women who are employed in manufacturing or productive activities as entrepreneurs. Women should be empowered to be equal partners with men in industrial development, whether as technicians, workers, managers or entrepreneurs.

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Prospects and challenges for women by region

Studies carried out by UNIDO on the role of women in manufacturing have identified several areas for action, adapted to the special needs and constraints of women in various regions of the world.

Africa	Agriculture plays a more important role than industry. The manufacturing sector is characterized by labour-intensive light industries as well as informal productive activities. Women are only marginally involved in manufacturing and are seriously affected by poverty. Many countries are undergoing industrial restructuring.	**Actions to be taken:** ◆ strengthening of mutual support networks at the community level; ◆ new mechanisms of credit for women entrepreneurs in the formal and informal sectors; ◆ capacity-building programmes to reduce barriers to occupational mobility; ◆ technical assistance including technical skills, management and marketing, linked to credit.
Asia	In many countries, female employment in the manufacturing and service sectors has grown faster than male employment. The majority of women are at the lower end of the occupational scale in unskilled jobs with few opportunities for career development. A large portion of productive activities of women remain unrecorded.	**Actions to be taken:** ◆ developing methods to collect gender-disagregated data on the role of women in manufacturing; ◆ changing the public image of non-traditional female roles and occupations in industry; ◆ providing access to women for training in line with the emerging needs of the industrial sector; ◆ reducing gender imbalances in technical education and training.
Europe, USA, Canada	Although the participation rate of women in the manufacturing sector is lower than in the service sector, it is still the highest among the regions, with the greatest concentration of women in the manufacturing sectors of Eastern and Central European countries.	**Action to be taken:** ◆ economically justifiable job creation; in the future, more labour opportunities will depend on innovation in the manufacturing sector, the expansion of services in relation to manufacturing and growth of tertiary activities.
Latin America	A third of the region's labour force is female, employed predominantly in service sector unskilled jobs in urban areas. Women's participation rate in manufacturing has stabilized at around 16 %.	**Actions to be taken:** ◆ improve working conditions for women; ◆ diversify women's participation in various occupational catagories through training and retraining; ◆ assimilate female unemployment caused by privatization; ◆ integrate women in the export and modern service sectors.

Training in both management and technical fields, career counselling and confidence-building for women, alongside gender-awareness training for male co-workers and supervisors, should be instrumental in overcoming these obstacles.

The main challenge is to prepare women to become an integral part of the human-resource base for industrial development.

Is the industry responding to the needs of women and the community?

People-centred and sustainable industrial development can go a long way towards creating better living conditions for both women and men.

◆ Facet Andina, a non-governmental organization, and UNIDO modernized the centuries-old craft of pottery in the Bolivian village of Huayculi, 9,000 feet up in the Andes. The project specifically targeted women potters, and it achieved significant results. With the construction of a gas-fired kiln for the community, the village infrastructure was improved and productivity increased. Through the introduction of new technologies, a number of back-breaking tasks were eliminated. The installation of the gas-fired kiln, for example, not only relieved women of the chore of fetching firewood for the individual small kilns, but also halted the devastation of vegetation. The subsequent increase in income levels resulted in a reverse-migration trend, and the cultural heritage of one of the Americas' oldest ethnic minorities was preserved.

Protecting the environment

The Rio Declaration, adopted at the United Nations Conference on Environment and Development (UNCED) recognized the vital role women play in environmental management and development and described their full participation as "essential to achieve sustainable development."

Women are among those who stand to gain from cleaner industrial production technologies. On the one hand, they help combat pollution and promote a better and healthier environment in which women work and live. On the other hand, technological advances make it possible and affordable for women entrepreneurs to benefit from low-cost, energy-saving techniques beneficial to both their health and the environment.

◆ Rural women in the town of Azara in Plateau State, Nigeria, were introduced to solar evaporation techniques for the production of salt, which eliminated the need for fuel wood. The installation of a diesel-fuelled pump relieved women of the arduous task of making 20 or 30 trips to the salt fields each morning, carrying the salt on their heads in heavy pots.

Towards sustainable solutions

Conventions 100 and 111 of the International Labour Organisation (ILO) provide a framework for the legal protection of women in the workplace. Enforcement measures and other actions are still needed if women are to be considered and recognized as equal partners in the economic development of their respective societies.

According to UNIDO, the main challenge is to prepare women to become an integral part of the human-resource base for industrial development, in order to meet the changing requirements of the manufacturing sector. Any strategy for achieving this objective must involve both the private and public sectors.

The role of UNIDO

Since its inception in 1986 as a specialized agency of the UN system, UNIDO has accorded high priority to the integration of women in industrial development. In the 1990s, "Women in industry" has become a cross-sectoral theme for all UNIDO activities,

Technology: the growing challenge

The constant upgrading of technology has been an integral part of the process of industrialization. While introducing new technology may benefit some women in the short and possibly in the long run, observes the 1994 UN report on the *Role of Women in Development,* in the medium term it displaces women workers in favour of men. Women are disproportionately vulnerable to the impact of technological change because of their concentration in lower-skilled, labour-intensive jobs in both industry and services.

- In the manufacturing sector, the introduction of new technology seems to impact on women in two ways. In cases where rationalization and the reduction of labour-intensive work are the primary goals, women workers suffer as a result of lay-offs. But in cases where productivity improvements are the motivating factor, women often benefit from the consequent regeneration of the enterprise or industry.
- New technology demands new skills, often causing female workers to be displaced in favour of males. However, there are exceptions. With the introduction of electronic data entry, for example, female workers have often displaced male compositors.

The *World Survey on Women in Development* also sheds new light on the quantitative impact of advance information technology for women in service industries, where they are to a large extent still concentrated in routine occupations most susceptible to rationalization - clerical, bookkeeping, secretarial, typing, cashiers and sales. In the developing world, according to the *Survey,* women have been the main beneficiaries of employment creation in clerical and database entry work. This trend runs counter to a trend in the advanced economies away from clerical and secretarial work towards technical, professional and managerial employment, where women are less likely to be found. The *Survey* notes that the trends towards increasing employment in clerical and data-entry work in developing countries could therefore be associated as much with the displacement of these jobs in industralized countries (made possible by teleworking or remote working) as with a lag in the introduction of information technology in developing countries.

The wider application of information technology in the service industries creates atypical patterns of employment. Information technology, the *World Survey* notes, is contributing to a new dualism between a core workforce that is highly trained, multi-skilled and adaptable and a peripheral group of workers whose services can be acquired or dispensed with in response to the needs of the moment. For example, locating telework or data processing outside the mainstream of organization structures lends itself to such dualism, and there have been reports of isolation, minimal job and income security and the disintegration of the collective work ethic.

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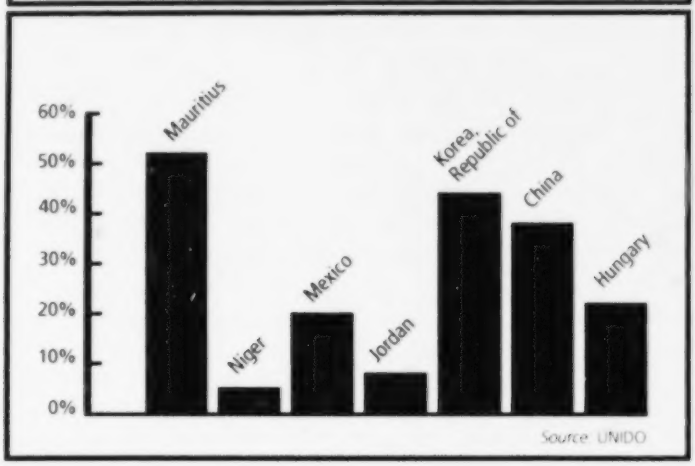
Participation rate of women in manufacturing employment for selected countries



with a three-pronged approach: a) mainstreaming with a gender perspective; b) a women's component in a large project; and c) women-specific projects to address specific constraints and needs of women.

Particular importance is being attached to enhancing the competitiveness of small-scale industries. For example, UNIDO's comprehensive training programmes in food processing in Africa and Central America upgrade entrepreneurial and marketing skills of women. A thematic programme to upgrade the technical, managerial and marketing skills of existing women entrepreneurs is being successfully applied in selected subsectors and countries in Africa. Similar UNIDO programmes are also being developed or implemented in other regions.

◆ In Nepal, UNIDO is assisting a women's cooperative enterprise with technology transfer and adaptation, quality control, and marketing handicrafts and processed food products.

◆ In China, a special programme for women entrepeneurs has been developed for the integration of women in the modernization process. When suitably modified and adjusted to local conditions, this programme can be replicated in other countries with economies in transition.

◆ In sub-Saharan Africa, a joint UNIDO-IFAD project addresses the development and transfer of appropriate technology for rural women. A platform with a multifunctional engine has been put into use for milling and power generation. Apart from adding value to the agricultural products of women, it has also become a source of additional off-season income.

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